CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/924,340

CRF Processing Date: 10/10/2001
Edited by: _____
Verified by: _____ (STIC staff

ENTERED

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was wrapped down to the next line.

☐ Edited a format error in the Current Application Data section, specifically: _____

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included: _____

☐ Deleted extra, invalid, headings used by an applicant, specifically: _____

☑ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files: ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically: _____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically: _____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☐ Other: _____
_____
_____
_____

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/924,340

DATE: 10/10/2001
TIME: 18:15:39

Input Set : N:\jumbos\924340.txt
Output Set: N:\CRF3\10102001\I924340.raw

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   2 <110> APPLICANT: Bejanin, Stephane
   3        Tanaka, Hiroaki
   5 <120> TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
   7 <130> FILE REFERENCE: 91.US2.REG
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/924,340
  10 <141> CURRENT FILING DATE: 2001-08-06
  12 <150> PRIOR APPLICATION NUMBER: US 60/305,456
  13 <151> PRIOR FILING DATE: 2001-07-13
  15 <150> PRIOR APPLICATION NUMBER: US 60/302,277
  16 <151> PRIOR FILING DATE: 2001-06-29
  18 <150> PRIOR APPLICATION NUMBER: US 60/298,698
  19 <151> PRIOR FILING DATE: 2001-06-15
  21 <150> PRIOR APPLICATION NUMBER: US 60/293,574
  22 <151> PRIOR FILING DATE: 2001-05-25
  24 <160> NUMBER OF SEQ ID NOS: 112
  26 <170> SOFTWARE: JPatent
  28 <210> SEQ ID NO: 1
  29 <211> LENGTH: 2016
  30 <212> TYPE: DNA
  31 <213> ORGANISM: Homo sapiens
  33 <220> FEATURE:
  34 <221> NAME/KEY: 5'UTR
  35 <222> LOCATION: 1..1434
  37 <220> FEATURE:
  38 <221> NAME/KEY: CDS
  39 <222> LOCATION: 1435..1836
  41 <220> FEATURE:
  42 <221> NAME/KEY: 3'UTR
  43 <222> LOCATION: 1837..2016
  45 <220> FEATURE:
  46 <221> NAME/KEY: polyA_signal
  47 <222> LOCATION: 1965..1970
  49 <220> FEATURE:
  50 <221> NAME/KEY: polyA_site
  51 <222> LOCATION: 2001..2016
  53 <400> SEQUENCE: 1
  54 aaggtctctc tgcatgcata caccaaggaa aagccacatg aggacataac caggaagaga   60
  55 gccatcacca agaacccgaa catgcggaca ccctgatctc ggacttctag ccttcagaac  120
  56 cgttgccaca gttttgatga tcatctctct cccaaccaag atggtggaaa aagcaaaaac  180
  57 gtggtgaatc ttggagcaat ccgacaaggc atgaaacgct tccaatttct gttaaactgc  240
  58 tgtgagccag ggacaattcc tgatgcctcc atcctagcag ctgccttgga tctactatgc  300
  59 ggcattcttc tgattcattt ttctccattt gtgctgtttt tctctgtgat gtgaatccat  360
  60 ccctatccat tatgtcatgc ctccatcttt tgctgcttct tcagattgca ctgagccata  420
  61 agaggaagcc cctgtggtgg ccagagcagc cttgttcctg gaatgtgctc gttttgttca  480
  62 ccgctgcaac cgtggcaact ggccagagtg gatgaaaggg caccacgtga acatcaccaa  540
  63 gaaaggactt tcccgggggac gctctcccat tgtgggcaac aagcgaaacc agaagctgca  600
  64 gtggaatgca gccaagctct tctaccaatg gggagacaag gaaaaaggt gaagaataaa  660
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/924,340

Input Set : N:\jumbos\924340.txt
Output Set: N:\CRF3\10102001\I924340.raw

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65  aggaaattca agaggaccaa gtttctgcta attttagaca gagctgaaca taaacacaca  720
66  taaagaggtt ccatatattc ctcttttctt aaagattact tggaataact gttacaattt  780
67  ccgttaataa ttcagctgaa tgtgtctacc aatgtgctta ccaactaagg caattggcgt  840
68  ccgattgaat gagctgtgcc acggggaaag tgagagccca gccaacctgc tgggtctcat  900
69  ttacgatgaa gagaccaaga ggagacttag aaaggaggat gaggaggaag actttttaga  960
70  tgacattcca ctttcaagtc aatacacagc tcatcttgca tttaaaagct gattatggtg 1020
71  caagcaactt tcgggctgga aattctacag aagcttgtct tttccattct tgatgagagg 1080
72  caaagtcccc ggcaacaaat taactcagga gagaaaatgg ttttcctgaa aaaaacgata 1140
73  gcttaaatat ctacagaaag accgtaattt ccacctattt tcaaatgaaa tcgtgaaaaa 1200
74  cacatttgga ctagagctga aacaacttca ctgccctcaa aacagcaaga cagacatccc 1260
75  tcataaaatg aactgacaga attttttatag ctccaaatct agttcactgc catatacata 1320
76  gtctaaatct gattgaatag cagcgtagaa atcttgcgaa attacttccc atttctgttt 1380
77  tcgttaaaag gtactgtgaa cccctctaaa tgcggttgcc cctttgcctt gaag atg     1437
                                                                    Met
                                                                     1
78
79
80  gca gca tgt cag ctt ctt ctg gag att acc acc ttc ctg cga gag acc   1485
81  Ala Ala Cys Gln Leu Leu Leu Glu Ile Thr Thr Phe Leu Arg Glu Thr
             5                    10                    15
82
83  ttt tct tgc ctg ccc aga cct cgc act gag cct ctg gtg gct tca acg   1533
84  Phe Ser Cys Leu Pro Arg Pro Arg Thr Glu Pro Leu Val Ala Ser Thr
             20                    25                    30
85
86  gac cac acc aaa atg cca tct caa atg gaa cac gcc atg gaa acc atg   1581
87  Asp His Thr Lys Met Pro Ser Gln Met Glu His Ala Met Glu Thr Met
        35                    40                    45
88
89  atg ttt aca ttt cac aaa ttc gct ggg gat aaa ggc tac tta aca aag   1629
90  Met Phe Thr Phe His Lys Phe Ala Gly Asp Lys Gly Tyr Leu Thr Lys
    50                    55                    60                 65
91
92  gag gac ctg aga gta ctc atg gaa aag gag ttc cct gga ttt ttg gaa   1677
93  Glu Asp Leu Arg Val Leu Met Glu Lys Glu Phe Pro Gly Phe Leu Glu
                     70                    75                    80
94
95  aat caa aaa gac cct ctg gct gtg gac aaa ata atg aag gac ctg gac   1725
96  Asn Gln Lys Asp Pro Leu Ala Val Asp Lys Ile Met Lys Asp Leu Asp
                 85                    90                    95
97
98  cag tgt aga gat ggc aaa gtg ggc ttc cag agc ttc ttt tcc cta att   1773
99  Gln Cys Arg Asp Gly Lys Val Gly Phe Gln Ser Phe Phe Ser Leu Ile
100                   100                   105                   110
101 gcg ggc ctc acc att gca tgc aat gac tat ttt gta gta cac atg aag   1821
102 Ala Gly Leu Thr Ile Ala Cys Asn Asp Tyr Phe Val Val His Met Lys
103              115                   120                   125
104 cag aag gga aag aag taggcagaaa tgagcagttc gctcctccct gataagagtt   1876
105 Gln Lys Gly Lys Lys
106 130
107 gtcccaaagg gtcgcttaag gaatctgccc cacagcttcc cccatagaag gatttcatga 1936
108 gcagatcagg acacttagca aatgtaaaaa taaaatctaa ctctcatttg acaagcagag 1996
109 aaagaaaaaa aaaaaaaaat                                             2016
111 <210> SEQ ID NO: 2
112 <211> LENGTH: 134
113 <212> TYPE: PRT
114 <213> ORGANISM: Homo sapiens
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/924,340

DATE: 10/10/2001
TIME: 18:15:39

Input Set : N:\jumbos\924340.txt
Output Set: N:\CRF3\10102001\I924340.raw

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116 <400> SEQUENCE: 2
117 Met Ala Ala Cys Gln Leu Leu Leu Glu Ile Thr Thr Phe Leu Arg Glu
118 1               5                   10                  15
119 Thr Phe Ser Cys Leu Pro Arg Pro Arg Thr Glu Pro Leu Val Ala Ser
120             20                  25                  30
121 Thr Asp His Thr Lys Met Pro Ser Gln Met Glu His Ala Met Glu Thr
122         35                  40                  45
123 Met Met Phe Thr Phe His Lys Phe Ala Gly Asp Lys Gly Tyr Leu Thr
124     50                  55                  60
125 Lys Glu Asp Leu Arg Val Leu Met Glu Lys Glu Phe Pro Gly Phe Leu
126 65                  70                  75                  80
127 Glu Asn Gln Lys Asp Pro Leu Ala Val Asp Lys Ile Met Lys Asp Leu
128             85                  90                  95
129 Asp Gln Cys Arg Asp Gly Lys Val Gly Phe Gln Ser Phe Phe Ser Leu
130             100                 105                 110
131 Ile Ala Gly Leu Thr Ile Ala Cys Asn Asp Tyr Phe Val Val His Met
132         115                 120                 125
133 Lys Gln Lys Gly Lys Lys
134     130

136 <210> SEQ ID NO: 3
137 <211> LENGTH: 1081
138 <212> TYPE: DNA
139 <213> ORGANISM: Homo sapiens
141 <220> FEATURE:
142 <221> NAME/KEY: 5'UTR
143 <222> LOCATION: 1..38
145 <220> FEATURE:
146 <221> NAME/KEY: CDS
147 <222> LOCATION: 39..917
149 <220> FEATURE:
150 <221> NAME/KEY: 3'UTR
151 <222> LOCATION: 918..1081
153 <220> FEATURE:
154 <221> NAME/KEY: polyA_signal
155 <222> LOCATION: 1045..1050
157 <220> FEATURE:
158 <221> NAME/KEY: polyA_site
159 <222> LOCATION: 1066..1081
161 <400> SEQUENCE: 3
162 gtccagcctg ttgctgatgc tgccgtgcgg tacttgtc atg gag ctg gca ctg cgg   56
163                                            Met Glu Leu Ala Leu Arg
164                                            -25                 -20
165 cgc tct ccc gtc ccg cgg tgg ttg ctg ctg ctg ccg ctg ctg ctg ggc  104
166 Arg Ser Pro Val Pro Arg Trp Leu Leu Leu Leu Pro Leu Leu Leu Gly
167             -15                 -10                 -5
168 ctg aac gca gga gct gtc att gac tgg ccc aca gag gag ggc aag gaa  152
169 Leu Asn Ala Gly Ala Val Ile Asp Trp Pro Thr Glu Glu Gly Lys Glu
170             1                   5                   10
171 gta tgg gat tat gtg acg gtc cgc aag gat gcc tac atg ttc tgg tgg  200
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172 Val Trp Asp Tyr Val Thr Val Arg Lys Asp Ala Tyr Met Phe Trp Trp
173     15                  20                  25
174 ctc tat tat gcc acc aac tcc tgc aag aac ttc tca gaa ctg ccc ctg     248
175 Leu Tyr Tyr Ala Thr Asn Ser Cys Lys Asn Phe Ser Glu Leu Pro Leu
176 30                  35                  40                  45
177 gtc atg tgg ctt cag ggc ggt cca ggc ggt tct agc act gga ttt gga     296
178 Val Met Trp Leu Gln Gly Gly Pro Gly Gly Ser Ser Thr Gly Phe Gly
179             50                  55                  60
180 aac ttt gag gaa att ggg ccc ctt gac agt gat ctc aaa cca cgg aaa     344
181 Asn Phe Glu Glu Ile Gly Pro Leu Asp Ser Asp Leu Lys Pro Arg Lys
182         65                  70                  75
183 acc acc tgg ctc cag gct gcc agt ctc cta ttt gtg gat aat ccc gtg     392
184 Thr Thr Trp Leu Gln Ala Ala Ser Leu Leu Phe Val Asp Asn Pro Val
185         80                  85                  90
186 ggc act ggg ttc agt tat gtg aat ggt agt ggt gcc tat gcc aag gac     440
187 Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser Gly Ala Tyr Ala Lys Asp
188     95                  100                 105
189 ctg gct atg gtg gct tca gac atg atg gtt ctc ctg aag acc ttc ttc     488
190 Leu Ala Met Val Ala Ser Asp Met Met Val Leu Leu Lys Thr Phe Phe
191 110                 115                 120                 125
192 agt tgc cac aaa gaa ttc cag aca gtt cca ttc tac att ttc tca gag     536
193 Ser Cys His Lys Glu Phe Gln Thr Val Pro Phe Tyr Ile Phe Ser Glu
194             130                 135                 140
195 tcc tat gga gga aaa atg gca gct ggc att ggt cta gag ctt tat aag     584
196 Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile Gly Leu Glu Leu Tyr Lys
197             145                 150                 155
198 gcc att cag cga ggg acc atc aag tgc aac ttt gcg ggg gtt gcc ttg     632
199 Ala Ile Gln Arg Gly Thr Ile Lys Cys Asn Phe Ala Gly Val Ala Leu
200         160                 165                 170
201 ggt gat tcc tgg atc tcc cct gtt gat tcg gtg ctc tcc tgg gga cct     680
202 Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val Leu Ser Trp Gly Pro
203         175                 180                 185
204 tac ctg tac agc atg tct ctt ctc gaa gac aaa ggt ctg gca gag gtg     728
205 Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys Gly Leu Ala Glu Val
206 190                 195                 200                 205
207 tct aag gtt gca gag caa gta ctg aat gcc gta aat aag ggg ctc tac     776
208 Ser Lys Val Ala Glu Gln Val Leu Asn Ala Val Asn Lys Gly Leu Tyr
209             210                 215                 220
210 aga gag gcc aca gag ctg tgg ggg aaa gca gaa atg atc att gaa cag     824
211 Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala Glu Met Ile Ile Glu Gln
212             225                 230                 235
213 gta aaa agg gga aac act cag agg cta gcc tgc ttg gct ttt tct ggt     872
214 Val Lys Arg Gly Asn Thr Gln Arg Leu Ala Cys Leu Ala Phe Ser Gly
215             240                 245                 250
216 ggg tac agg gcc cat ggt tgg tgt tgt caa act tgg agt cta cac     917
217 Gly Tyr Arg Ala His Gly Trp Cys Cys Gln Thr Trp Ser Leu His
218     255                 260                 265
219 tgaggctccc cacatatctg caaatgattg catgctggat aataaatctc ttgggtctaa    977
220 gcagtgatgt agtggctcct tacagagtca gaaagccacc caggcctgca agacttgctt   1037
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/924,340

DATE: 10/10/2001
TIME: 18:15:39

Input Set : **N:\jumbos\924340.txt**
Output Set: **N:\CRF3\10102001\I924340.raw**

1081

```
221 gtccttcact aaatgtatgg attctattaa aaaaaaaaaa aaaa
223 <210> SEQ ID NO: 4
224 <211> LENGTH: 293
225 <212> TYPE: PRT
226 <213> ORGANISM: Homo sapiens
228 <220> FEATURE:
229 <221> NAME/KEY: SIGNAL
230 <222> LOCATION: 1..26
232 <400> SEQUENCE: 4
233 Met Glu Leu Ala Leu Arg Arg Ser Pro Val Pro Arg Trp Leu Leu Leu
234     -25                 -20                 -15
235 Leu Pro Leu Leu Leu Gly Leu Asn Ala Gly Ala Val Ile Asp Trp Pro
236 -10                 -5                  1                   5
237 Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val Thr Val Arg Lys Asp
238             10                  15                  20
239 Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Asn Ser Cys Lys Asn
240         25                  30                  35
241 Phe Ser Glu Leu Pro Leu Val Met Trp Leu Gln Gly Gly Pro Gly Gly
242     40                  45                  50
243 Ser Ser Thr Gly Phe Gly Asn Phe Glu Glu Ile Gly Pro Leu Asp Ser
244 55                  60                  65                  70
245 Asp Leu Lys Pro Arg Lys Thr Thr Trp Leu Gln Ala Ala Ser Leu Leu
246             75                  80                  85
247 Phe Val Asp Asn Pro Val Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser
248         90                  95                  100
249 Gly Ala Tyr Ala Lys Asp Leu Ala Met Val Ala Ser Asp Met Met Val
250         105                 110                 115
251 Leu Leu Lys Thr Phe Phe Ser Cys His Lys Glu Phe Gln Thr Val Pro
252     120                 125                 130
253 Phe Tyr Ile Phe Ser Glu Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile
254 135                 140                 145                 150
255 Gly Leu Glu Leu Tyr Lys Ala Ile Gln Arg Gly Thr Ile Lys Cys Asn
256             155                 160                 165
257 Phe Ala Gly Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser
258         170                 175                 180
259 Val Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp
260         185                 190                 195
261 Lys Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala
262     200                 205                 210
263 Val Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala
264 215                 220                 225                 230
265 Glu Met Ile Ile Glu Gln Val Lys Arg Gly Asn Thr Gln Arg Leu Ala
266             235                 240                 245
267 Cys Leu Ala Phe Ser Gly Gly Tyr Arg Ala His Gly Trp Cys Cys Gln
268         250                 255                 260
269 Thr Trp Ser Leu His
270         265
272 <210> SEQ ID NO: 5
273 <211> LENGTH: 438
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10/10/01

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/924,340

DATE: 10/10/2001
TIME: 18:15:40

Input Set : N:\jumbos\924340.txt
Output Set: N:\CRF3\10102001\I924340.raw

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L:9 M:270 C: Current Application Number differs, Replaced Application Number
L:1470 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:27
L:1470 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1491 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:27
L:1491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1537 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1592 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:29
L:1592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:1655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:4089 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:71
L:4089 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71
L:4156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
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